Wissahickon Watershed Partnership Meeting Tuesday, October 25, 2011, 9:00 a.m. – 11:00 am Wissahickon Valley Watershed Association, 12 Morris Road, Ambler

Attendees: See below at end of notes

Meeting Notes

Introduction and Welcome - Paul Racette, Pennsylvania Environmental Council (PEC

Paul R. provided a brief overview of the agenda, noting that focus of meeting is on:

- Progress of Act 167 stormwater management plan
- Update on Wissahickon Valley Watershed Association water quality monitoring
- Restoration and stormwater best management projects (BMPs) and inventory
- Preview of the sediment Total Maximum Daily Load (TMDL) plans required by Department of Environmental Protection (PADEP) municipal stormwater permit.

Update on Wissahickon Act 167 Stormwater Plan - Rick Fromuth, *Temple University Center for Sustainable Communities* and Paul DeBarry, *NTM Engineering*

Rick and Paul D's presentation focused on flood plain mapping, problem area identification, and modeling. Hydrological modeling is being performed to predict how stormwater improvements and land use changes impact run off volumes and peak flow rates. Hydraulic modeling is being used in the Sandy Run and Ambler area of the watershed to predict flood plain water levels associated with stormwater management practices. Additional funding is required to extend the hydraulic modeling to other areas of the watershed.

Paul D has received data (e.g. location of stormwater structures and/or locations of problem areas) from all municipalities except for Abington, Ambler, Horsham, Upper Dublin, and Whitemarsh. Municipalities are encouraged to submit data for the Act 167 plan, which in turn can be applied by Temple and NTM to help municipalities identify solutions to stormwater problems.

See <u>http://www.phillywatersheds.org/wiss_working</u> for a copy of Rick and Paul's presentation.

WVWA Water Quality Monitoring Program - Dennis Pennington, *Wissahickon Valley Watershed Association*

Dennis provided an overview of water quality data collection performed by the Wissahickon Valley Watershed Association (WVWA). Summary bullets from his presentation are listed below. Summary slides are also posted on the <u>http://www.phillywatersheds.org/wiss_working</u> web link:

- WVWA collects nutrient (phosphorous and nitrogen), bacteria, dissolved oxygen (DO), and sediment data.
- WVWA just installed a continuous monitoring station outside of their headquarters building in Ambler; they collect DO, conductivity, and temperature data.
- Sandy Run tributary is a source of water pollution (e.g. it is much muddier with sediment than the main-stem creek during storm events).
- Water quality improvements have been noted in recent years; Dennis noted that improved golf course management and homeowner stormwater education programs have contributed to these improvements.
- There is a low flow issue in the upper watershed; variable flow due to lack of base flow/groundwater recharge.
- Dissolved oxygen concentrations can decrease to low concentrations (below 2 parts per million) at night when no oxygen is being generated by algae and other aquatic plant life.
- Higher pollutant concentrations are recorded in the summer (e.g. bacteria).

Report on Philadelphia Water Department Stream Restoration and Stormwater Management Projects in Lower Watershed – Erik Haniman, *Manager, PWD Ecological Restoration Unit*

Erik reported on four PWD projects ongoing in tributary streams that drain into the Wissahickon Creek in Fairmount Park. He noted that PWD had initially evaluated sediment loading to the creek using bank pins. Stream bank erosion documented via the pins demonstrated that stream bank erosion is a major contributor to sediment loading in that area of the watershed. PWD is now implementing projects in four tributaries to address sedimentation and other stormwater related issues. Bio-retention basins are being constructed to capture and slow runoff and related pollutants. Stream restoration is being implemented to stabilize banks, reduce erosion, and restore aquatic habitats. The first three projects listed below are in the construction phase, while the fourth is in being designed. Erik's presentation is also posted on the http://www.phillywatersheds.org/wiss_working web link:

<u>Cathedral Run bio-retention basin:</u> The project includes the retention basin with sediment capture fore bay that is cleaned out up to 3 times a year.

<u>Wises Mill bio-retention basin and stream restoration</u>: This project includes a bio-retention basin and 7,000 linear feet of stream restoration.

Bell's Mill stream restoration: This project includes 1 mile of stream restoration.

Gorges Run stream restoration: This project includes 2,000 feet of stream restoration.

PWD is completing assessment, design, construction, and monitoring activities at each of these projects. The reduction is sediment loading to the creek achieved via these and other projects will be applied toward the City's compliance with the Wissahickon Creek's sediment TMDL.

Update on other Wissahickon Best Management Projects - Paul Racette, *PEC* and Bob Adams, *Wissahickon Valley Watershed Association*

Paul R. and Bob Adams presented brief updates on stormwater and stream restoration projects ongoing in the lower and upper watershed. Paul also passed around a project inventory list that describes partner projects across the watershed. This list can be downloaded from http://www.phillywatersheds.org/wiss_working) or contact Paul for a copy (see contact information in footer below). Paul briefly made note of the following projects:

- Philadelphia Parks and Recreation gully repair projects (4 of 7 complete)
- Friend's of Wissahickon gully/trail repair projects (1 complete, 3 underway)
- Philadelphia Parks and Recreation meadow restoration (Houston Meadow).
- Springfield Township Paper Mill Run stream restoration
- Upper Dublin, Whitpain, and North Wales basin retrofit projects

Bob Adams summarized the following WVWA projects:

- Upper Gwynedd Township stormwater basin retrofit
- Crossway's Preserve Meadow restoration
- Plymouth Dam removal
- Borit Asbestos remediation, Ambler

Slides from Paul and Bob's presentation are posted on the <u>http://www.phillywatersheds.org/wiss_working</u> web link.

Update on Regional Stormwater BMP Database (T-VSSI) - Thomas Spokas, *Temple University Center for Sustainable Communities*

Tom informed the group of Temple/Villanova's regional stormwater BMP database. The database inventories projects by watershed and by project type. Data is collected on project description, location (map), images and plans, construction costs, and contact information. Tom encouraged Wissahickon stakeholders to both consult the inventory and to provide project information. See <u>http://www.phillywatersheds.org/wiss_working</u> for a copy of Thomas's presentation.

Short Overview/Discussion of PAG-13 TMDL Requirements - Paul Racette, PEC

Paul R. presented a short overview on the latest PA DEP updates to PAG-13 program focusing on Wissahickon TMDL requirements. His presentation is posted on the <u>http://www.phillywatersheds.org/wiss_working</u> web link. A short summary is as follows:

- Table of sediment TMDL waste load reductions (pounds/year) required for each Wissahickon municipality presented.
- PAG-13 requires that municipalities present a TMDL compliance plan by no later than September14, 2012, which will give PA DEP up to 180 days to approve plan by March 15, 2013.

Pennsylvania Environmental Council, 1315 Walnut Street, Suite 532, Philadelphia, PA 19107, <u>www.pecpa.org</u> Paul Racette, Water Resources Program Manager, 215-545-4570 x112, <u>pracette@pecpa.org</u>

- PAG-13 requires design work for proposed BMPs be developed during first year of new permit cycle, and that BMP implementation start during the third year.
- PAG-13 provides a list of BMP practices/projects that can be implemented to achieve sediment reductions.
- PAG-13 requires that an analytical justification be provided demonstrating that sediment reduction projects planned by municipalities will result in achievement of required waste load reductions.
- No specific analytical methods or metrics provided by PAG-13.
- PAG-13 will allow trading of sediment reduction credits.

Paul R. recommended that Watershed Partnership municipalities meet/collaborate further to identify approaches for developing TMDL plans and analytical approach. (Note: PEC has developed a Wissahickon sediment trading approach that includes a prototype TMDL plan). Discussion then focused on what metrics/methods can be used to verify compliance with TMDL. No specific methods identified during meeting, but suggestion made to develop a calculator that quantifies sediment reductions achieved by various BMP practices. Erik Haniman noted that the stormwater basin retrofits projects are a ready approach for reducing sediment loading.

Attendees at Wissahickon Watershed Partnership		
Date: 10/25/2011	Purnose: Partnership Meeting (Act 167 + Projects + TMDL)	
Name	Organization	E-mail or Phone
Bob Adams	Wissahickon Valley Watershed Association	Bob@wvwa.org
Bob Baker	Montgomery Township EAC	Barryabaker@verizon.net
Bob Harries	Friends of Wissahickon	bobharries@aol.com
Chuck Bailey	Springfield Township	cbailey@springfield- township.org
Dan McCreary	Upper Gwynedd	danugt@comcast.net
Dan Shinskie	Lansdale Borough	dshinskie@lansdale.org
David Burke	PADEP	daburke@state.pa.us
Dennis Pennington	Wissahickon Valley Watershed Association	dennisp.07@comcast.net
E.J. Lee (confirm if attended)	Whitemarsh Township	elee@whitemarshtwp.org
Erik Haniman	Philadelphia Water Department Office o Watersheds	Erik.Haniman@phila.gov
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Jennifer Kehler	PADEP	jekehler@pa.gov
Jennifer Sherwood	Abington Township EAC	eac.abington@gmail.com
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Nathan Walker	AMEC	nathan.walker@amec.com

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Scott Marlin	Abington Township	smarlin@abington.org
Tom Spokas	Temple University Center for Sustainabl Communities	tom.spokas@gmail.com
Valessa Souter-Kline	Philadelphia Water Department Office o Watersheds	valessa.souter-kline@phila.go